## River Maps Assessment Item: Student Responses



	Student Response	Your Ranking
А	No, because water runs from the tributaries to major water sources, not the other way around.	
В	Yes because they connect so they will have the same pollution.	
С	Yes. Water flows down or south.	
D	No. Because it would be against gravity. All tributaries flow into the lake where the elevation is lower.	
E	Yes because the water current of river c could catch the pollution	
F	No, due to the watershed.	

## **Learning Progression Rubric**

Level 4 Qualitative Model-based Accounts	<ul> <li>Uses topography, gravity, and permeability as principles to reason about water flow.</li> <li>Uses maps and diagrams to interpret structure of water systems.</li> </ul>
Level 3 School Science Stories	<ul> <li>Uses school rules to trace water without indicating attention to underlying conceptual principles such as forces (e.g., gravity, potential energy) or constraining factors (e.g., permeability, topography).</li> <li>Relies on naming processes or features without indicating how they explain the phenomenon.</li> </ul>
Level 2 Force Dynamic Accounts with Mechanisms	<ul> <li>Views water as having natural tendencies such as "flowing," "traveling," "spreading," "drifting".</li> <li>Invokes forces such as wind or current.</li> <li>Says water flows down the page or down the map or south (as down)</li> </ul>
Level 1: Simple Force Dynamic Accounts	<ul> <li>Describes water becoming polluted because it is connected to other polluted water.</li> </ul>

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